Competency and the Six Core Competencies

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"The Congress has found the following: (1) The Federal government, through its Medicare program, pays approximately $8 billion per year solely to train resident-physicians in the United States, and as a result, has an interest in assuring the safety of patients treated by resident-physicians and the safety of resident-physicians themselves." [1]

With this prologue to House bill HR 3236, lawmakers expressed their growing interest in graduate medical education. Their concerns are not only with patient safety but also with the competency of the physicians being trained. Naturally, it followed that this interest would prompt an inquiry into the training and competency of resident-physicians. Over the past several years, medical educators have found that they must not only prepare well-qualified physicians but that these trained physicians must also be prepared in the most cost-effective manner. A new paradigm and new standards were required to train the latest generation of physicians. The teachers of medicine, who traditionally held themselves above politics, were thrust into the fray.

It also follows that the same standards for which resident-physicians are held will, in good time, be applied to all practicing physicians. But what standards and whose definition of competency should be adopted to characterize a practicing physician. Only minimal progress has been made in defining these standards for independent practitioners. But the issues of competency and core competencies have been studied in residency programs and have generated a great deal of intellectual ferment. It is, therefore, instructive to study the evolving form that competency parameters are taking in graduate medical education, for these same parameters eventually will be applied to private practitioners.

Residency programs today are judged by a "minimum threshold" according to how they comply with standards set by the Accreditation Council for Graduate Medical Education (ACGME) and their individual Residency Review Committees (RRCs). Residencies are evaluated to determine whether they comply with the "Requirements" of the RRC. The effectiveness of a residency program to train surgeons is evaluated with tools that rely on structure and process. For example, programs are checked to see whether they have established objectives, an organized curriculum, proper teaching faculty, and a process that evaluates the program and residents, i.e., "Structure and Process."

Evaluation of structure and process, however, does not give a direct measure of the educational quality of that program. Rather, it is only a measure of the potential of the program to educate physicians.

In the 1980s, the U.S. Department of Education recognized the limits of structure and process evaluation. Educational outcome data were found to more accurately reflect the ability of a program to teach its students. The Department spearheaded an effort for greater inclusion of outcome assessment parameters to measure the quality of programs under their jurisdiction.

Educational outcome data are now accepted as being capable of accurately measuring the quality of a training program. These (outcome-based) data are, therefore, crucial to accurately inform decision-makers of the effectiveness and quality of our residency programs. Parenthetically, it should be noted that these data also provide a measure for evaluating the medical educators.

The ACGME in keeping with its mission to ensure the quality of graduate medical education initiated an Outcome Project several years ago to assess physician competence. The Outcome Project was envisioned as a long-term initiative to enhance medical education and to ensure the quality of that process. Under this initiative, the paradigm for evaluating medical education will shift from a dependence on structure and process to one that demonstrates achievement of leaning by educational outcome assessment, a methodology governed by the principle that what we measure, we tend to improve.

The model for accreditation of programs proposed by the ACGME will concentrate on the actual accomplish-

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ment of a program to educate rather than the potential to educate. Questions raised during an outcome-based evaluation will include:

1. Do the residents achieve the learning objectives set by the program?

2. What evidence can the program provide that it does so?

3. How does the program demonstrate continuous improvement in its educational processes?

The focus on educational outcomes will occur through the use of general and specialty-specific core competencies and related learning objectives. Development of the competencies is not complete; they are "a work in progress." The ACGME notes that dependable methods for assessing competency-based learning objectives need to be developed. It has, therefore, given the medical education community an opportunity to develop them. The need for programs to provide evidence of structure and process will not disappear, but these elements will become less critical (in the accreditation process) as the competencies become more fully developed.

Through a study of existing research on the competency of physicians, the Outcome Project Advisory Committee identified 6 general core competencies. These 6 were endorsed by the ACGME in February 1999.

The 6 general competencies are:

- Patient care
- Medical Knowledge
- Professionalism
- Systems-based Practice
- Practice-based Learning
- Interpersonal and Communication Skills

Minimum language regarding the competencies and evaluation process was also developed by the ACGME in September 1999. All RRCs and Institutional Review Committees are to have included this minimum language in their respective Program or Institutional Requirements, or both of these, by June 2001.

In essence, the ACGME has mandated that programs require that their residents obtain competency in 6 areas to the level expected of a new practitioner. The individual programs must define the specific knowledge, skills, and attitudes required, and provide educational experiences as needed for their residents to demonstrate:

1. Patient Care that is compassionate, appropriate, and effective for treating health problems and promoting health;

2. Medical Knowledge about established and evolving biomedical, clinical, and cognate (eg, epidemiological and social-behavioral) sciences and the application of this knowledge to patient care;

3. Practice-Based Learning and Improvement that involves investigation and evaluation of their own patient care, appraisal, and assimilation of scientific evidence, and improvements in patient care;

4. Interpersonal and Communication Skills that result in effective information exchange and teaming with patients, their families, and other health professionals;

5. Professionalism, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population;

6. Systems-Based Practice, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.

Measurement tools for the evaluation process are being developed for the different residency programs. Although many of these tools will be common to the different specialties, each RRC has been encouraged to develop measurement devices specific to their specialty.

Concomitant with the above activities in residency training programs, demand has increased for accountability in the private practice of medicine. The demand for accountability has been fueled in part because of expensive technological advances in medical management, the failure of managed care to adequately and humanly conserve financial resources, an increased dependence on federal monies to finance health care, an aging population, widely reported instances of medical errors, a sagging economy, and other factors.

Many now feel that a shift will occur in emphasis from certification-recertification examinations (structure and

process) of established practitioners to an outcomes-based evaluation of these practitioners. The process would shift from periodic recertification to an almost continuous maintenance of certification. In this paradigm, the 6 core competencies could provide a link to, or a framework for, the evaluation of practicing physicians.

It would not be hard to imagine that readily retrievable information such as a physician's ethical performance of medical staff responsibilities could be assessed as a measurement tool under the competency of Professionalism. Similarly, a practitioner's individual morbidity and mortality statistics could be compiled and utilized as an outcome measurement tool under the competency of Practice-Based Learning and Improvement. Medical errors (incorrect interpretation of orders, misplaced decimal point, illegible handwriting, etc.) would fall under the competency of Systems-Based Practice.

The incorporation of the 6 core competencies into all residency programs will affect not only residents but also physicians. The American Board of Medical Specialties (ABMS) has endorsed the general competencies for use by certifying boards in the examination and recertification of physicians. In some manner, measurement of outcomes-based parameters will affect all practitioners.

As responsible practicing physicians, it is important to become conversant with the principles of outcomes-based evaluation and become knowledgeable of the core competencies. In the not too distant future, these same competencies may be used to evaluate a private physician's practice of medicine and surgery.

Key Words: Competency, Core competency, General competencies, Certification.

Reference:

1. A bill (HR 3236) introduced in the House of Representatives by Mr. Conyers (for himself, Mr. Waxman, Mr. Stark, Ms. Norton, Mr. Andrews, Ms. Rivers, Mr. Boucher, Ms. Kaptur, Mr. Kildee, Mr. Kucinich, Mr. Kleczka, Mr. Green of Texas, and Mr. Hall of Ohio) to amend title XVIII of the Social Security Act to reduce the work hours and increase the supervision of resident-physicians to ensure the safety of patients and resident-physicians themselves. November 6, 2001